

IN THE CLAIMS:

1. (Currently amended) An apparatus comprising:
 - a first queue to track a current rate of task completion;
 - a second queue to track an average rate of task completion over time;
 - a comparator to compare an average of values stored in the first queue and an average of values stored in the second queue; and
 - a throttle to reduce ~~the~~ a number of connections available on the apparatus if the comparator indicates that the average of the first queue is larger than the average of the second queue, wherein the comparator triggers comparisons more often as the number of connections is decreased.
2. (Original) The apparatus of claim 1, wherein the first queue and the second queue are circular queues.
3. (Currently amended) The apparatus of claim 1, further comprising:
 - a timer to compute a length of time a connection is used[[,]] and ~~to add~~ insert the time into the first queue.
4. (Currently amended) The apparatus of claim 1, wherein the average of values stored in the first queue is ~~added~~ inserted into the second queue.
5. (Currently amended) The apparatus of claim 1, further comprising:
 - a trigger mechanism to trigger a comparison, the trigger mechanism triggering comparisons more often as the number of connections is ~~decreased~~ increased.

6. (Original) The apparatus of claim 5, further comprising:
a powers array to indicate when to trigger a comparison to the trigger mechanism, the powers array being an exponentially increasing/decreasing function.
7. (Original) The apparatus of claim 1, further comprising:
a sensitivity multiplier applied to the average of the second queue to affect reaction speed.
8. (Original) The apparatus of claim 1, wherein the connections comprise network connections for sending messages, and wherein the apparatus comprises a multimedia messaging service center.
9. (Currently amended) The apparatus of claim 1, wherein the rate of task completion ~~tracked by the system~~ comprises timing one subtask of a complex task, the subtask reflecting a load on the apparatus ~~system~~.
- 10-18. (Cancelled)
19. (Currently amended) The ~~FIDO monitor~~ apparatus of claim ~~1-10~~, wherein the throttle further increases the number of connections available if the average rate of task completion is lower than the average of the average rates of task completion.
20. (Currently amended) A method of resource allocation comprising:
comparing a current average rate of task completion of a system to an average of averages, wherein the average of averages is the average of a plurality of the results of each of the current average rate of task completion over time;
reducing a number of tasks executed by the system if the current average rate of task completion is larger than the average of averages, ~~reducing a number of tasks~~

~~executed by the system~~ wherein the comparison is triggered more frequently as the number of tasks executed is reduced.

21. (Currently amended) The method of claim 20, further comprising:

triggering the comparison based on ~~an~~ a number of measurements of the current rate of task completion reaching a predetermined threshold.

22. (Currently amended) The method of claim 21, further comprising:

adjusting the predetermined threshold ~~comparison trigger~~ based on results of a last comparison.

23. (Currently amended) The method of claim 22, wherein the predetermined threshold is increased and the comparison is triggered less frequently if the system is speeding up ~~the comparison is triggered less frequently, and if the system is slowing down the comparison is triggered more frequently.~~

24. (Currently amended) The method of claim 23, wherein ~~a frequency~~ the predetermined threshold is set by a powers array, the powers array being a powers-of-two array; and

the predetermined threshold is adjusted by shifting along the powers-of-two array to speed up or slow down the rate of triggering the comparison.

25. (Currently amended) The method of claim 20, further comprising:

timing a period of time that a connection is used; and
~~adding~~ inserting the period of time into a first queue, the average of the first queue being the current average rate of task completion.

26. (Currently amended) The method of claim 25, further comprising:

~~adding~~inserting the average of the first queue into a second queue, the average of the second queue being the average of averages.

27. (Original) The method of claim 26, wherein the first queue and the second queue are circular queues.

28. (Original) The method 26, wherein the average of the first queue and the average of the second queue are calculated when a comparison is triggered.

29. (Currently amended) The method of claim 28, wherein a current average of the first queue is ~~added~~inserted into the second queue after the average of the second queue is calculated.

30. (Currently amended) The method of claim 20, wherein ~~measuring the rate of~~ task completion ~~comprises~~ is determined by measuring a length of time required to complete one subtask of a complex task, the subtask reflecting an overall load on the system.

31. (Canceled)